

NEW DESCRIPTIONS

MELANOCHAETOMYIA, A NEW GENUS OF CHLOROPIDAE (DIPTERA) FROM THE ORIENTAL REGION¹

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(With five text-figures)

Key words: *Melanochaetomyia* gen. nov., *M. rubrohalterata* sp. nov., Chloropid fly, Oriental Region

Melanochaetomyia gen. nov. is described from India with *M. rubrohalterata* sp. nov., the type species.

INTRODUCTION

The close affinities of *Elachiptera* Macquart to its congeners *Melanochaeta* Bezzi, *Disciphus* Becker, *Anatrichus* Loew and others were recognized by earlier workers like Duda (1934), Cherian (1975) and Sabrosky (1977). Andersson (1977) brought them together under genus *Elachiptera*, which was followed by Kanmiya (1983). Nartshuk (1983, 1987) assigned the status of a tribe, namely Elachipterini Lioy, to this group after removing *Cadrema* Walker and adding four more genera to it. While studying this tribe, one new species was found, which possesses a combination of characters not found in any other genus of the tribe or any other Chloropid genera. A new generic name, *Melanochaetomyia* is proposed to describe this species.

The type specimen is deposited in the collections of the Southern Regional Station, Zoological Survey of India, Chennai. Regn. No. I/DC/122; SRS/ZSI.

Melanochaetomyia gen. nov.

Type species: *Melanochaetomyia rubrohalterata* sp. nov.

Description: Black, stocky-bodied flies with polished frontal triangle bearing long hairs on each half, 10 *orb*, 1+2 *npl* and a bristle on katepisternum (sternopleuron).

Head higher than long; frons slightly widened at vertex otherwise parallel-sided, projecting above and beyond eyes anteriorly, with long dense punctate *fr*; frontal triangle large, polished, reaching four-fifths length of frons, with nearly pointed apex and punctate hairs on the triangle on either side. Face deeply concave, densely silvery grey tomentose; facial carina low, reaching almost middle of face; epistomal margin a little raised. Antenna erect; ant 2 with long slender spine; ant 3 reniform, 1.3x as wide as long; arista not terminal; flagellum slender with long, fairly dense hairs. Eye large with vertical long axis and very dense pubescence. Gena rather narrow, densely tomentose, as also postgena, the latter with long hairs; vibrissal corner nearly a right angle; vibrissa long and slender; occipital margin around bases of *ovt* and *ivt* tomentose and with dense hairs; a row of postocular setae well developed. Head bristles black with erect and convergent *oc*, well-developed vertical bristles, 9-10 *orb* and inclinate *if*.

Thorax predominantly brownish-black; scutum glabrous with two lateral and two median longitudinal stripes and white punctate hairs; humeral callus and the area behind up to base of wing, part of *anepst*, hypopleuron and margins of scutellum tomentose; scutellum nearly semicircular

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with almost flattened disc and punctate hairs; thoracic bristles well developed with 1 *h*, 1+2 *npl*, *pa* 1, *pa* 2, 1 *dc*, widely separated *as* and *ss* 1 and a bristle on *kepst* as in species of *Cadrema*.

Wing with brownish tinge; m_{1+2} ending beyond apex of wing; r-m cross-vein beyond middle of discal cell; anal angle well developed. Haltere partly red and yellow.

Legs brownish-black, but for yellow tarsi; femoral organ a row of 7-8 short spines; tibial organ long, oval.

Abdomen black, somewhat shiny, densely silvery-grey tomentose with long erect hairs except for dorsal areas of basal segments. Male genitalia: Epandrium broader than long; surstylus broadly triangular, narrowly rounded apically; cercus moderately developed; hypandrium broadly and shallowly incised on outer margin of basal bridge; aedeagal apodeme well developed; distiphallus subcylindrical, progressively somewhat narrowing distally; postgonite unlike in *Melanochaeta* not triangular but subcylindrical, ending with a somewhat obtuse apex.

Gender and derivation: Feminine; from *Melanochaeta* plus the suffix *myia*.

One species, *rubrohalterata* is described here which is the type species.

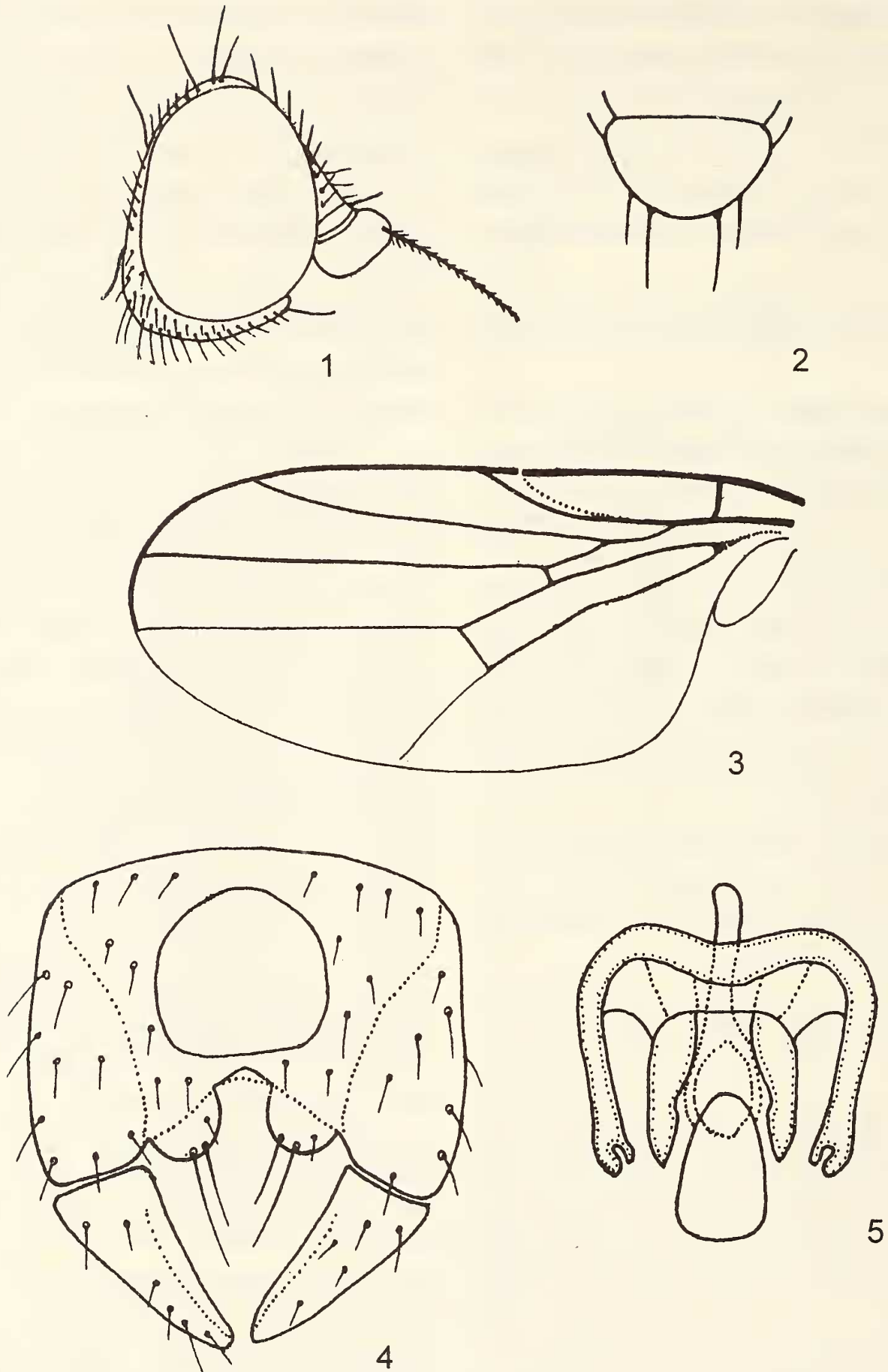
Melanochaetomyia rubrohalterata sp. nov.
(Figs 1-5)

Male: Head (Fig. 1): Much higher than long, length, height and width ratio 2:3:4. Frons greatly depressed, but anteriorly area beyond lunule projecting prominently above eyes, parallel-sided but slightly widened at vertex, where it is silvery grey tomentose and with prominent hairs, width 0.85x the length and 0.43x the width of head, blackish-brown, but projecting area anteriorly brownish-yellow, wholly with prominent whitish-black *fr*; frontal triangle large, shiny brownish-black, reaching four-fifths the length of frons, ending with narrowly obtuse apex, with a few

prominent punctate hairs on triangle mostly confined to either side of median part and the area behind, area inner to lateral margin with 2 to 3 very low, linear short ridges and depressions, each commencing from vertex margin and extending to level of posterior margin of anterior ocellus. Face deeply concave, much narrower than frons, brownish-black, very densely silvery grey tomentose and hence appearing grey; facial carina very low, triangular between eyes and extending hardly one-fourth the length of face and roofed basally by projecting frons; spine on ant 2 long; ant 3 reniform, 1.5x as wide as long, upper one-third brownish-black, rest yellow; arista black, basal segments slightly thickened and with short hairs, flagellum slender with dense prominent concolorous hairs. Gena dark brown, one-fifth as wide as ant 3, grey plumose; vibrissal corner almost a right angle with long, slender vibrissa; postgena concolorous with and plumose like gena. Palpi yellowish-brown; proboscis partly shiny black and partly brown. Head bristles well developed, black; *ovt* and the cruciate *pvt* subequal; *ivt* a trifle shorter than *ovt*; *oc* upright, convergent, three-fifths the *pvt*; *orb* about 10, posterior 4 more developed and reclinate to partly erect, the rest slanting and inclinate; *if* in a row outside the triangle along lateral margin and a few on the triangle on either side not in rows; *if* and the well developed *fr* almost of equal size; a well developed row of long black postocular setae very prominent.

Thorax: Almost as wide as head, predominantly brownish-black, scutum 1.15x as long as wide with glabrous, greatly convex disc bearing two median and two lateral longitudinal dark blue stripes, of which each of former commences from the anterior margin and extends to three-fifths the length, while both more broad lateral ones extend from level of humeral callus and taper off above 1 *dc* at the level of *pa* 2, wholly covered with dense white finely punctate hairs which are somewhat parted along narrowly grooved *acr* and *dc* lines; humeral callus and area

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Figs 1-5: *Melanochaetomyia rubrohalterata* sp. nov., 1. Head, 2. Scutellum, 3. Wing, 4. Epandrium, 5. Hypandrium and Phallic complex

up to base of *pa* 1 densely silvery grey tomentose; scutellum (Fig. 2) nearly semicircular, 1.2x as wide as long, with nearly flattened glabrous disc and thick, densely tomentose margins, concolorous with and punctate and pubescent like scutum; pleura brownish-black with glabrous black maculae along lower anterior margin of *anepst*, lower margin of meron above coxa on *anepm*, except for part of lower halves densely tomentose; *kepst* with long white hairs and one bristle. All thoracic bristles black, well developed; *h* 1; *npl* 1+2 and 1 *dc* all subequal; *pa* 1 a trifle longer than *pa* 2 and shorter than 1 *dc*; *as* as long as scutellum, widely separated; *ss* 1, 0.6x the *as*.

Wing (Fig. 3): Brownish, as long as body and 2.42x as long as wide, distinctly brownish; m_{1+2} ending beyond wing apex; proportions of costal sectors 2 to 4 in the ratio 25:15:8; r-m cross-vein beyond middle of discal cell at 0.57 of its length; terminal sectors of r_{4+5} and m_{1+2} parallel; anal angle well developed. Distal half of knob of haltere reddish, basal part and stalk yellow.

Legs: With dense yellow hairs; coxae, trochanters, femora and tibiae brownish-black; femoral organ well developed, distinctly projecting in the form of one row of 8 to 9 warts; tibial organ long, oval; all tarsi yellow; midtibia with a slender terminal spine.

Abdomen: Somewhat shiny black, whole of dorsum grey tomentose, covered with long dense black hairs except for the median parts of

basal segments.

Male genitalia (Figs 4, 5): epandrium much wider than long; cercus with two long hairs; surstylus well developed, with conspicuous hairs; postgonites with a few short hairs distally.

Length: Male 2.8 mm; wing 2.7 mm.

Holotype: Male, INDIA: Meghalaya: Nangpo, 10.iv.1979, Coll. P.T. Cherian.

Remarks: This species was collected along with other members of the Tribe Elachipterini belonging to genera *Melanochaeta* Bezzi, *Elachiptera* Macquart and *Cadrema* Walker from the Nango forest in Meghalaya, a haven for diverse groups of insects, especially dipterans. It differs from all its congeners, apart from other characters, in possessing well-developed hairs on the frontal triangle.

Abbreviations: *acr* acrostical; *anepm* anepimeron; *anepst* anepisternum; *as* apical scutellar bristle; *dc* dorsocentral bristle; *fr* frontal hairs; *h* humeral bristle; *if* interfrontal bristle; *ivt* inner vertical bristle; *kepst* katepisternum; *npl* notopleural bristle; *oc* ocellar bristle; *orb* fronto-orbital bristle; *ovt* outer vertical bristle; *pa* postalar bristle; *pvt* postvertical bristle; *as* subapical scutellar bristle.

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